

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Atty. Ref.: **4662-31**
SNIJDER et al Conf. No.: **8425**
Serial No. **10/537,895** Group: **1794**
Filed: **July 19, 2005** Examiner: **Ruddock**
For: **SURGICAL SOFT TISSUE MESH**

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February 2, 2009

Commissioner for Patents
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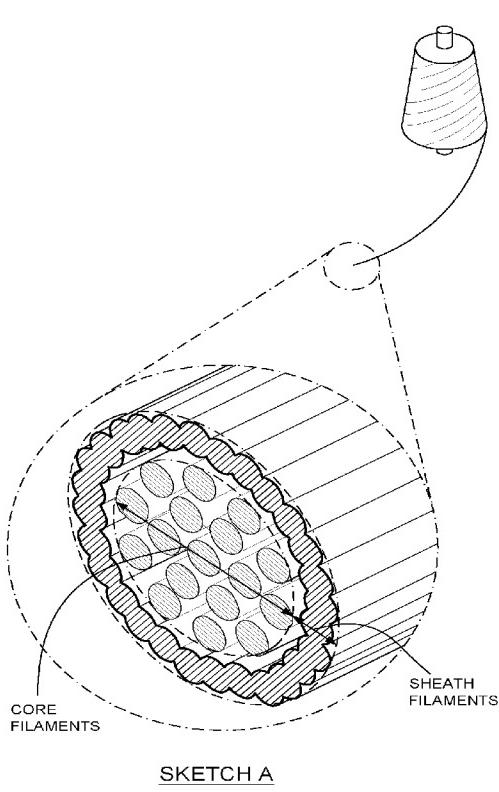
APPLICANTS' REASONS IN SUPPORT OF PRE-APPEAL
BRIEF REQUEST FOR REVIEW

1. The Claimed Invention

Independent claims 1 and 11 define a polyethylene yarn which comprises *inter alia*:

- (i) polyethylene ***sheath filaments*** and polyethylene ***core filaments***, wherein
- (ii) the core filaments show ***substantially no adhesion to each other***; and
- (iii) the sheath filaments form a ***substantially non-porous layer around the core filaments***.

A cross-sectional schematic representation of a single yarn end in accordance with the presently claimed invention is therefore depicted in Sketch A below. As shown, the construction of such a yarn end as claimed herein includes sheath filaments which form a substantially non-porous layer around the core filaments (e.g., due to the sheath filaments being melt-adhered to one another), while the core filaments show substantially no adhesion to one another (e.g., so they may be separated from one another upon lengthwise sectioning of the yarn or removal of the sheath filaments).



2. The Examiner's Art-Based Rejection is Erroneous

(i) The Examiner has Erroneously Misinterpreted the Pending Claims

The Examiner asserts on page 4 of the final official action that:

"[Applicant's argument in the August 13, 2008 Amendment that the claimed yarn is comprised of 'multiple filaments'] is not persuasive because it is not commensurate in scope with the claims as presently written. *The claims do not require multiple filaments.*" (emphasis added)

Applicants are quite perplexed by such a statement since the pending claims herein explicitly require the yarn to include "sheath filaments" and "core filaments". Basic English language grammar (of which official notice can be taken) dictates that the addition of an "s" to a singular noun forms a plural of that noun. Thus a singular filament becomes plural (read: multiple; read: more than one) filaments. Multiple (read:

plural; read: more than one) filaments are thus precisely being defined in the applicants' pending claims.

The Examiner further states on page 4 of the final official action that:

"[Applicant's argument in the August 13, 2008 Amendment that the individual core filaments are substantially not adhered to one another while the individual sheath filaments provide a substantially non-porous layer surrounding the core filament] is also not commensurate in scope with the claims because the claims, as presently written, do not specify or require 'individual core filaments' or 'individual sheath filaments'."

While it is true that the claims do not state the word "individual" before the terms "sheath filaments" and "core filaments" it is quite clear by the claim language that the core filaments show substantially no adhesion to one another while the sheath filaments form a substantially non-porous layer around the core filaments. By any reading of the claim language therefore it cannot be disputed rationally that each (read: individual ones) of the multiple (read: plural) core filaments are substantially non-adhered to one another while each (read: individual ones) of the multiple (read: plural) sheath filaments form a substantially non-porous layer around the core filaments.

Contrary to the Examiner's assertions, therefore, the arguments that were presented with the applicants' prior amendment of August 13, 2008 are entirely commensurate with the pending claims.

(ii) The Examiner has Erroneously Misinterpreted the Applied References

The Examiner persists in her rejection of prior claims 1-4 as allegedly "obvious" and hence unpatentable over D'Aversa et al (USP 6,090,116) in view of Schmitt et al (USP 6,669,706). In essence, the Examiner alleges that it would have been obvious to the skilled person (35 USC §103(a)) to have used the yarns composed of a sheath and

core of Schmitt et al in the multifilament of the knitted surgical mesh of D'Aversa et al and thereby arrive at the present invention. Applicants emphatically disagree.

D'Aversa et al discloses a knitted surgical mesh using monofilament or multifilament polypropylene yams. D'Aversa et al further discloses that the yarn used to form the mesh may be formed from polyethylene.

Schmitt et al discloses a surgical mesh which can be knitted and is produced from multifilament yams. In one embodiment, the multifilament yarns are bicomponent yams composed of a sheath and a core structure. Schmitt et al is directed to **bicomponent** filaments per se. This means that **each** filament 42 of Schmitt includes a core polymer component (noted by reference numeral 46 in Fig. 6 of Schmitt) and a contiguous outer sheath polymer component (noted by reference numeral 44 in Fig. 6 of Schmitt). Such a bicomponent filament is quite different indeed from a yarn which itself is comprised of **multiple filaments** wherein (a) some filaments in the yarn are in a core region and show substantially no adhesion to one another (i.e., filaments that are not adhered to one another and thus can be easily separated), and (b) other filaments in the yarn are in a sheath region with such sheath filaments providing a substantially non-porous layer surrounding the core filaments. The latter attributes (a) and (b) are of course those of the presently claimed invention.

Thus, contrary to the Examiner's assertions, Schmitt et al does not disclose multiple filaments forming a non-porous sheath with other filaments forming a separable core (i.e., filaments that are substantially not adhered to one another and thus can be easily separated).

Even if the bicomponent filaments of Schmitt were employed in the mesh of D'Aversa et al, the presently claimed invention would still not be the result. That is, there is no disclosure or suggestion therein of providing a yarn which itself is comprised of **multiple filaments** wherein (a) some filaments in the yarn are in a core region and show substantial no adhesion to one another (i.e., filaments that are not adhered to one

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another and thus can be easily separated), and (b) other filaments in the yarn are in a sheath region with such sheath filaments providing a substantially non-porous layer surrounding the core filaments.

3. Conclusion

Because of the Examiner's erroneous interpretation of both the pending claims and the applied references, the rejections advanced under 35 USC §103(a) based on D'Aversa et al and Schmitt et al must be withdrawn.

Respectfully submitted,

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